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(54) Title: **BIODEGRADABLE POLYURETHANE/UREA COMPOSITIONS**

(57) **Abstract:** The present invention relates to biocompatible, biodegradable polyurethane/urea polymeric compositions that are capable of *in-vivo* curing with low heat generation to form materials suitable for use in scaffolds in tissue engineering applications such as bone and cartilage repair. The polymers are desirably flowable and injectable and can support living biological components to aid in the healing process. They may be cured *ex-vivo* for invasive surgical repair methods, or alternatively utilized for relatively non-invasive surgical repair methods such as by arthroscope. The invention also relates to prepolymers useful in the preparation of the polymeric compositions, and to methods of treatment of damaged tissue using the polymers of the invention.

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